AUTHOR INDEX

Akhurst, R.J. 153
Arend, W.P. 193

Baird, A. 223
Barde, Y.-A. 237
Basler, K. 15
Bee, N.S. 45

Chamberlain, C.G. 29

FitzPatrick, D.R. 153

Gatherer, D. 153
Graham, G.J. 181
Gullick, W.J. 1
Guy, G.R. 45

Hafen, E. 15
Honjo, T. 207

Josso, N. 169

Lappi, D.A. 223
Lehnert, S.A. 153

McAvoy, J.W. 29
Millan, F.A. 153
Murakami, K. 113

Nishimatsu, S. 113

Peng, C.S. 45
Pragnell, I.B. 181

Risau, W. 71

Saito, Y. 207

Ueno, N. 113

van Zoelen, E.J.J. 131

Wilks, A.F. 97
Williams, N. 81

SUBJECT INDEX

Activin
  binding protein 120
  cell differentiation 116
  embryonic induction 117
  primary structure 115
  receptors 119
Alveolar macrophages, interleukin-1 receptor antagonist production 197
Amphiregulin 3
Angiogenesis 71
  FGFs 73
  PD-ECGF 75
  TGF-β 75, 157
  TNF 75
  VEGF 75
Anti-Müllerian hormone 169–179
  ontogeny 172
  reproductive tract effects 173
Atrial naturetic peptide receptor 106

Bacterial toxins, mitotoxins 226
Brain-derived neurotrophic factor
  biological activity 241
  gene expression 243
  structure 239
Breast cancer
  anti-oncogenes 7
  growth factors 2
  growth factor receptors 3
  IGF bioassay 141
  oncogenes 5
Burst-forming unit-megakaryocyte 82

Cancer
  anti-Müllerian hormone 175
  growth factors and oncogenes 1–8
Cardiogenesis, TGF-β 158
c-*ernB*-2, breast cancer 3, 4
c-*myc*, breast cancer 6
Colony-forming unit-megakaryocyte 82
Colony-forming unit-stem cells, peptide inhibitors 182
Colony-stimulating factors
  eye 38
  signal transduction 58

Development
  anti-Müllerian hormone production 172
  Drosophila, receptor tyrosine kinases 15–27
  TGF-β 153
Differentiation
  activin 116
  megakaryocytes 82
  TGF-β 164
Diphtheria toxin, mitotoxins 226
Drosophila
  EGF receptor homolog 21
  receptor tyrosine kinases during development 15–27

Embryogenesis
  activin 117
  DER 21
  TGF-β 153–168
Embryonal carcinoma-derived growth factor 144
Endothelial cells, angiogenic growth factors 71, 157
Endothelial–mesenchymal transformation, TGF-β 158
Epidermal growth factor
  angiogenesis 74
  based mitotoxins 229
  bioassay 134, 145
  eye 29, 38
Epidermal growth factor receptor
  breast cancer 4
  Drosophila homolog 21
  human–*Drosophila* comparisons 16
  protein tyrosine kinase 100
Epithelial cells, interleukin-1 receptor antagonist production 200
Epithelial–mesenchymal interactions, TGF-β 161
Erythroid differentiation factor 116, 118, 119
Erythropoietin, platelet production 86
Extracellular matrix
  FGF, eye 31
  TFG-β 161
Eye-derived growth factor 30
Eye development, *Drosophila*, RTKs 17
Eye, growth factors in 29–43
  CSFs 38
  EGF 38
  FGFs 30
  IGFs 34
  NGF 37
  PDGF 36
  TGF-β 35

Fibroblast growth factors
  angiogenesis 73
  based mitotoxins 231
  bioassay 143
  breast cancer 3
  eye 29, 30

5-Fluorouracil, platelet production 88
Follicle stimulating hormone, inhibin and activin 114
Follistatin 120

Granulocyte–macrophage colony-stimulating factor
  eye 29, 38
  induction of interleukin-1 receptor antagonist production 197
  signal transduction 58
Growth factor-toxins 223–236

Haemopoiesis
  negative regulators 181–192
    therapeutic potential 188
  TGF-β 157
Haemoregulatory peptide 182
Heart, TGF-β and development 158
Heparin-binding growth factors 74
  bioassay 143, 145
H-*ras*, breast cancer 5
hst, breast cancer 2

Immunotoxins 230
Inhibin 114
Insulin-like growth factors
  based mitotoxins 231
  bioassay 140
  breast cancer 3
  eye 29, 34
Int-2
  breast cancer 2
  eye 33
γ-Interferon, signal transduction 59
Interleukin-1 193
  inhibitors 194
  megakaryocyte development 85
  signal transduction 46
Interleukin-1 receptor antagonist 194
  biochemistry and molecular biology 195
  biological properties *in vitro* 200
  in epithelial cells 200
  induction of production 196
  in vivo effects 202
  regulation of production 198
Interleukin-2 207
  based mitotoxins 227
  signal transduction 49, 217
Interleukin-2 receptor 207–222
  high-affinity, mechanism of formation 209
  structure 208
Interleukin-3, signal transduction 52
Interleukin-4
  based mitotoxins 228
  signal transduction 53
Interleukin-5, signal transduction 55
Interleukin-6
  based mitotoxins 228
  megakaryocyte development and platelet production 86
  signal transduction 55

Kidney cells, growth factor bioassay 135, 138

Leukemia inhibitory factor, platelet production 87
Leukemias, negative regulators of haemopoiesis 188
Lung, TFG-β in morphogenesis 162
Luteinizing hormone releasing factor, breast cancer 3
Lymphokines, signal transduction 45–70

Macrophage colony-stimulating factor, signal transduction 58
Macrophage inflammatory protein 1α, haemopoiesis regulation 185
Macrophages, interleukin-1 receptor antagonist production 197
Mammary gland, TGF-β in morphogenesis 162
Manchester inhibitor, haemopoiesis regulation 184
Megakaryocytopoiesis 81–95
  cellular differentiation 82
  endocrine regulation 87
  growth factor stimulation 85
  paracrine regulation 88
Mesoderm induction, activin 117
Mitogens, endothelial specific 75
Mitotoxins 224
  EGF-based 229
  FGF-based 227
  NGF-based 230
  transferrin-based 228
Morphogenesis, TGF-β 158
Müllerian-inhibiting factor 169–179
  ontogeny 172
  reproductive tract effects 173

Nerve growth factor 237
  based mitotoxins 230
  biological activity 241
  eye 29, 37
  gene expression 243
  structure 239
Neuronal development, TGF-β 164
Neurotrophin-3
  biological activity 241
  gene expression 243
  structure 239
Neurotrophins
  biological activity 241
  gene expression 243
  structure 238

Oligodendroglial type-2 astrocyte progenitor cells, PDGF 38
Oncogenes
  breast cancer 5
  protein tyrosine kinase families 97–111
Oocyte meiosis, anti-Müllerian hormone 174

p53 gene, breast cancer 7
Platelet-derived endothelial cell growth factor, angiogenesis 75
Platelet-derived growth factor
  bioassay 139, 145
  eye 29, 36
Platelet-derived growth factor receptor, protein tyrosine kinase 100, 103
Platelet production
  endocrine regulation 87
  growth factor stimulation 85
  paracrine regulation 88
Protein kinase C, induction by interleukin-2 50
Protein tyrosine kinases 97
  catalytic domain 102
  cytoplasmic 101
  growth factor receptors 100
  kinase-related domains 106
  structural diversity 98
Pseudomonas aeroginosa exotoxin 226

ras, breast cancer 5
RB gene, breast cancer 7
Receptor tyrosine kinases, *Drosophila* development 15–27
Reproductive tract, effect of anti-Müllerian hormone 173
Retina-derived growth factor 30
Rheumatoid arthritis, interleukin-1 antagonist in synovial fluid 202
Ribosome-inactivating protein 225
Ricin, mitotoxins 226, 229

Saporin-fibroblast growth factor 231
Second messengers, lymphokine action 45–70
Sevenless, receptor tyrosine kinases in *Drosophila* 16, 17
Signal transduction
  interleukin-2 217
  lymphokines 45–70
Skeletal development, TFG-β 158

Tetrapeptide, haemopoiesis regulation 183
Thrombopoietic stimulatory factor 87
Thrombopoietin 84, 87
Torso, receptor tyrosine kinases in *Drosophila* 16, 23
Transferrin, based mitotoxins 228
Transforming growth factor-α
  bioassay 134
  breast cancer 2
Transforming growth factor-β
  activin 114
  angiogenesis 75
  anti-Müllerian hormone 170
  bioassay 136, 145
  breast cancer 2
  embryogenesis 153–168
    angiogenesis 157
    cardiac development 158
    epithelial–mesenchymal interactions 161
    neuronal development 164
    skeletal development 159
  eye 29, 35
  haemopoiesis regulation 183, 188
Transforming growth factor-β receptors, breast cancer 4
Tumor necrosis factor
  angiogenesis 75
  signal transduction 56

Vascular endothelial growth factor, angiogenesis 75
Vascularization, TGF-β 157

Xenopus laevis, embryonic induction 117

Printed and bound in Great Britain by BPC-AUP Aberdeen Ltd.